

that they have to be trimmed to avoid accidental hanging while climbing the wires of their cage, like diminutive parrots.

The mysteries of nest building, housekeeping and the cares of nidification, are mysteries still. In the spring of 1900 the birds showed no signs of mating, and it was ascribed to their new surroundings. But during the last week of February, 1901, the female wished to go to housekeeping and materials were given them, fine twigs, fine birch bark and a little *Usnea* moss. But the male bird treated his mate with disdain, quarreling with her and driving her from perch to perch. Whether he resented the matchmaking because it was 'Hobson's choice,' or remembered the soft, sweet voice of the former partner of his joys and sorrows, the only "Mrs. *Leucoptera*" whom he had sworn to love and cherish till death part, and was loyal, I know not. Perhaps it was in grief, a memory of the blissful days in that far off northern home, among "The murmuring pines and the hemlocks, bearded with moss." Perhaps his tale of love was ended, "in Acadie, home of the happy."

SUMMER BIRDS OF THE GREAT DISMAL SWAMP.

BY JOHN W. DANIEL, JR.

DURING the middle of June, 1897, the writer, in company with Mr. William Palmer and Mr. Paul Bartsch, spent a week collecting birds in the Lake Drummond region of the Great Dismal Swamp. As is well known, this great morass occupies a billowy plain, some forty miles long by twenty-five miles across, extending from Suffolk, Va., to Albemarle Sound, N. C. Its entire western boundary is determined by a sharply defined escarpment, formed by the sea when the continent was about twenty-eight feet below its present level.

Its eastern boundary is marked by a series of low elevations, dune-like in nature, extending from Norfolk, Va., to Elizabeth City, N. C. The character of the swamp land is continuously undulating, the elevations rising and falling at slight intervals.

They are not, however, great and average only a few feet. The trees are principally cypress (*Taxodium*), black gum, beech and juniper, and there is a luxuriant growth of ferns and aquatic plants. Cane grows in profusion. The swamp comes within the Austro-riparian sub-province and contains several tropical genera of the smaller mammals and many semi-tropical plants. As regards birds, it is not especially rich with respect to species, although there is an abundance of individuals of certain forms.

Lake Drummond, in the northeastern part, is the only body of water of any size within the limits of the swamp. It is a beautiful sheet of water, of an oval contour, six miles long and three miles wide. During our visit, the country immediately adjacent to the lake was fairly well worked over, most of our collecting being done along the margins of the lake and its several small inlets.

Owing to the swampy conditions, much of the country is inaccessible, and travel on foot is possible only in the more elevated parts. Most of our travel was effected by means of small boats,—the characteristic ‘dugout’ of the region. In some parts, however, there are roads constructed of logs by the lumbermen, and these afford access to the country several miles back from the lake.

I append, with short annotations, a list of the birds observed during our visit.

1. *Phalacrocorax dilophus*. DOUBLE-CRESTED CORMORANT.—Accidental. A single individual taken on the lake near the southeastern shore.

2. *Ardea herodias*. GREAT BLUE HERON.—Fairly abundant on the lake shore. Several noticed on the inlets. One taken on “Jericho Ditch,” near Suffolk.

3. *Ardea virescens*. GREEN HERON.—Common. Many seen on the inlets.

4. *Philohela minor*. AMERICAN WOODCOCK.—Several noticed at twilight feeding near camp at junction of ‘Washington’ and ‘Jericho’ districts.

5. *Cathartes aura*. TURKEY VULTURE.—Not very common. A few noticed.

6. *Buteo lineatus*. RED-SHOULDERED HAWK.—Quite abundant. A number observed in the timber near the southeastern shore of the lake.

7. *Syrnium nebulosum*. BARRED OWL.—Fairly abundant. Its hooting often heard at night. Frequents timber along the lake shore.

8. *Bubo virginianus*. GREAT HORNED OWL.—Not very common. Several heard hooting at night.

9. *Coccyzus americanus*. YELLOW-BILLED CUCKOO.—A few seen.

10. *Dryobates pubescens*.—DOWNY WOODPECKER.—Fairly common in woods of elevated parts.

11. *Dryobates villosus*. HAIRY WOODPECKER.—Fairly abundant in the heavy timber along the lake.

12. *Ceophlæus pileatus*. PILEATED WOODPECKER.—A few were seen in the heavy timber at the southeastern end of the lake.

13. *Melanerpes carolinus*. RED-BELLIED WOODPECKER.—Fairly abundant in the timber. Mr. Palmer took two specimens.

14. *Colaptes auratus*. FLICKER.—Not uncommon in the woods of the higher grounds.

15. *Chætura pelagica*. CHIMNEY SWIFT.—Quite abundant. We had the good fortune to observe a very interesting fact regarding these birds. Along the southeastern shore, growing in the lake some distance out from the shore line, are a number of large hollow cypresses. The roots or 'knees' of these trees extend upward and outward from the surface of the water, curving inward some distance up, and in most of them, between the water and base of the tree proper, there are openings large enough for a canoe to enter. By pushing our canoe in these intervals between the roots, we were able to examine the interiors of the hollow trees. In these we found the swifts nesting in their primitive fashion, the nests being fastened to the interior walls about midway down. Mr. Bartsch secured a nest containing eggs thus situated.

16. *Myiarchus crinitus*. CRESTED FLYCATCHER.—Quite abundant in timber near the lake shore.

17. *Contopus virens*. WOOD PEWEE.—Common in woods along the shore of the lake.

18. *Empidonax virescens*. GREEN-CRESTED FLYCATCHER.—Not uncommon along the margins of the inlets, notably where the foliage forms a canopy over the water. A nest containing eggs was found on a limb overhanging an inlet.

19. *Corvus americanus*. AMERICAN CROW.—Fairly common.

20. *Pipilo erythrophthalmus*. TOWHEE.—Abundant.

21. *Cardinalis cardinalis*. CARDINAL.—A few seen.

22. *Piranga rubra*. SUMMER TANAGER.—Fairly abundant in the woods along the southeastern lake shore.

23. *Vireo olivaceus*. RED-EYED VIREO.—Fairly abundant in the thick woods along the shore of the lake.

24. *Vireo noveboracensis*. WHITE-EYED VIREO.—Fairly common among the bushes and trees along the margin of the lake.

25. *Mniotilta varia*. BLACK AND WHITE WARBLER.—Not very common. Frequents the woods of the higher ground.

26. *Protonotaria citrea*. PROTHONOTARY WARBLER.—Decidedly the most abundant bird of the swamp. Everywhere common. Its beautiful plumage and odd song add a charm to the region, it being seen and heard in all kinds of weather and at all times of the day. Several nests in cavities of decayed trees, at slight height from the ground, were examined.

27. *Helinaia swainsonii*. SWAINSON'S WARBLER. — Rare. Frequents the cane brakes and dense growth of aquatic vegetation. Mr. Palmer took one and I captured a juvenile.

28. *Helminthus vermivorus*. WORM-EATING WARBLER. — Abundant. Frequents the wooded parts along the shore of the lake.

29. *Compsothlypis americana*. PARULA WARBLER. — Quite abundant. Nests in the hanging Spanish moss (*Usnea*) with which many of the cypresses were festooned.

30. *Dendroica vigosii*. PINE WARBLER. — Not common.

31. *Dendroica discolor*. PRAIRIE WARBLER. — Not very common. A few seen in the clearings near the lake shore at the northern end of the lake.

32. *Seiurus motacilla*. LOUISIANA WATER THRUSH. Fairly common.

33. *Geothlypis trichas*. MARYLAND YELLOW-THROAT. — Very abundant along the shore of the lake and among the aquatic plants and bushes that fringe the inlets. Noticed it as especially common along the edges of a log road at the northern end of the lake.

34. *Sylvania mitrata*. HOODED WARBLER. — Very abundant. Ranks second with *P. citrea* as the commonest species of the district. Several nests, one containing young, were examined. They were placed in the canebrake along the margins of one of the ditches.

35. *Setophaga ruticilla*. AMERICAN REDSTART. — Abundant.

36. *Galeoscoptes carolinensis*. CATBIRD. — Very abundant.

37. *Thryothorus ludovicianus*. CAROLINA WREN. — Not common. A few heard singing.

38. *Sitta carolinensis*. WHITE-BREASTED NUTHATCH. — Fairly abundant in the woods at the southeastern shore of the lake.

39. *Parus bicolor*. TUFTED TITMOUSE. — Abundant.

40. *Parus carolinensis*. CAROLINA CHICKADEE. — Abundant.

41. *Turdus mustelinus*. WOOD THRUSH. — Common. Observed in the woods at the southeastern end of the lake.